United States of America

DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item 1.28: to permit the use of the band 108-117.975 MHz for the transmission of radionavigation satellite differential correction signals by ICAO standard ground-based systems;

Background Information: An aviation requirement has emerged for the transmission of differential correction (augmentation) data for the Global Navigation Satellite System (GNSS), to be used by aircraft receivers to satisfy the stringent accuracy and integrity requirements for GNSS applications. The new Ground-based Augmentation Systems (GBAS) are planned to operate in the band 108-117.975 MHz (initially, 112-117.975 MHz), which is currently used by Instrument Landing Systems (ILS) and VHF Omni-directional Ranging (VOR) systems.

The band is currently allocated to the aeronautical radionavigation service. Because the differential correction signals transmitted by augmentation systems such as GBAS do not fall within the definition of a radionavigation service (i.e., using the propagation properties of radio waves), amendment to the allocation is needed to allow for the transmission of GNSS augmentation data.

ICAO is developing compatibility and frequency planning criteria between the VOR/ILS, and the new service. Any standards adopted by ICAO will be binding on signatories to the Chicago Convention of 1944 and thus do not need to be referenced in ITU Radio Regulations. GBAS receiver performance will be compatible with FM broadcast services in the band 87.5-108 MHz, and compatibility will be assured without imposing further restrictions on FM broadcast stations.

Proposal:

USA/ /1 MOD

108-117.975 MHz

Allocation to services		
Region 1	**Region 2**	**Region 3**
108-117.975	AERONAUTICAL RADIONAVIGATION 5.197 **ADD** 5.XXX	

Reasons: The modification to the table is a consequential change from adding the new footnote.

USA/ /2 ADD

5.XXX In the band 108 – 117.975 MHz, ground-based radionavigation-satellite-augmentation systems may transmit supplementary information intended for aircraft navigation.

Reasons: A footnote in the Radio Regulations is all that is necessary to permit the use of the band 108–117.975 MHz, on a worldwide basis, for the transmission of radionavigation satellite differential correction signals. The use of GBAS will increase the accuracy of satellite radionavigation systems and conform to the requirements for precision landing.

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